

A LOOK AT THE ENVIRONMENTAL ASPECTS OF COAL CONVERSION, R. R. Bertrand,
Exxon Research and Engineering Company, Linden, N.J. 07036

Several processes, either currently in operation or in the development stage, offer significant prospects for conversion of coal into relatively clean gaseous or liquid fuels. The scale of these processes needed for economic viability, likewise suggest a potential for significant environmental degradations in the immediate neighborhood of the conversion facility. The magnitude of the environmental aspects of coal conversion facilities will be assessed not only in terms of absolute potential but also in terms of likely effluent discharges based on application of demonstrated control technology. These assessments will draw heavily on an on-going study being conducted for the Environmental Protection Agency; a study that has involved discussion with process developers, plant visits and a detailed analysis of the probable environmental effluents from several coal conversion processes. A comparison will also be made of the probable magnitude of effluent discharges to be expected from coal conversion processes relative to those from alternate processes using coal and other fossil fuels for production of equivalent quantities of clean energy.